

AMENDMENTS TO THE CLAIMS

1. Claims 1 – 54. (Canceled)
55. (Currently amended) A diesel fuel composition comprising a base fuel and at least one additive wherein the additive comprises:
 - a plant oil extract derived from grain;
 - a carotenoid; and
 - a thermal stabilizer.
56. (Currently amended) The diesel fuel composition of claim 55, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
57. (Currently amended) The diesel fuel composition of claim 55 wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
58. (Currently amended) The diesel fuel composition of claim 55, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
59. (Currently amended) The diesel fuel composition of claim 55 wherein the plant oil extract is derived from barley and the carotenoid is β -carotene.
60. (Currently amended) The diesel fuel composition of claim 55 wherein the thermal stabilizer is meadowfoam oil.
61. (Currently amended) The diesel fuel composition of claim 55 further comprising a diluent.
62. (Currently amended) The diesel fuel composition of claim 55 further comprising a solvent selected from the group consisting of

toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~diesel fuel~~, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.

63. (Currently amended) The diesel fuel composition of claim 55 further comprising at least one additive consisting of the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
64. (Canceled)
65. (Currently amended) A diesel fuel composition comprising a base fuel and at least one additive wherein the additive comprises:
a hydrophobic plant oil extract;
a carotenoid; and
a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil, castor oil and mixtures thereof.
66. (Currently amended) The diesel fuel composition of claim 65 wherein the plant oil extract is derived from a member of the Leguminosae family.
67. (Currently amended) The diesel fuel composition of claim 65 wherein the plant oil extract is derived from grain.
68. (Currently amended) The diesel fuel composition of claim 65 further comprising a diluent.

69. (Currently amended) The diesel fuel composition of claim 65 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~diesel fuel~~, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.
70. (Currently amended) The diesel fuel composition of claim 65 further comprising at least one additive consisting of the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
71. (Currently amended) The diesel fuel composition of claim 65, wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
72. (Currently amended) The diesel fuel composition of claim 65 wherein the plant oil extract is barley oil extract; and the carotenoid is β -carotene.
73. (Currently amended) A diesel fuel composition comprising a base fuel and at least one additive wherein the additive comprises:
a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
a carotenoid; and
a thermal stabilizer.

74. (Currently amended) The diesel fuel composition of claim 73 wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
75. (Currently amended) The diesel fuel composition of claim 73, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
76. (Currently amended) The diesel fuel composition of claim 73 wherein the plant oil extract is derived from barley and the carotenoid is β -carotene.
77. (Currently amended) The diesel fuel composition of claim 73 wherein the thermal stabilizer is meadowfoam oil.
78. (Currently amended) The diesel fuel composition of claim 73 further comprising a diluent.
79. (Currently amended) The diesel fuel composition of claim 73 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, diesel fuel, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.
80. (Currently amended) The diesel fuel composition of claim 79 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

81. (Canceled)
82. (Canceled)
83. (Canceled)
84. (Canceled)
85. (Canceled)
86. (Canceled)
87. (Previously presented) A diesel fuel additive comprising:
 - a hydrophobic plant oil extract;
 - a carotenoid;
 - a thermal stabilizer selected from the group consisting of
peanut oil; cottonseed oil; rape seed oil; macadamia nut oil;
avacado oil; palm oil; palm kernel oil, meadowfoam oil; castor oil
and mixtures thereof; and
 - a solvent selected from the group consisting of toluene,
benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane,
octanes, nonanes, diesel fuel, jet fuel, gasoline, 2-cycle oil, resid
fuel, and mixtures thereof.
88. (Canceled)
89. (Canceled)
90. (Previously presented) The additive of claim 87 wherein the plant
oil extract is barley oil extract and the carotenoid is β -carotene.
91. (Previously presented) The additive of claim 87 further comprising
meadowfoam oil.
92. (Canceled)
93. (Canceled)

94. (Previously presented) A diesel fuel additive comprising a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
a carotenoid;
a thermal stabilizer; and
a solvent.
95. (Previously presented) The additive of claim 94 wherein the solvent is selected from the group consisting of toluene, benzene, O-xylene, m-xylene, p-xylene, cyclohexanes, hexanes, octanes, nonanes, diesel fuel, jet fuel, gasoline, two-cycle oil, resid fuel and mixtures thereof.
96. (Canceled)
97. (Previously presented) A diesel fuel additive comprising:
a plant oil extract derived from barley;
 β -carotene ; and
meadowfoam oil.
98. (Previously presented) The diesel fuel additive of claim 97 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, diesel fuel, jet fuel, 2-cycle oil, gasoline, resid fuel and mixtures thereof.
99. (Previously presented) A diesel fuel additive comprising:
barley oil;
 β -carotene; and
meadowfoam oil.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.